

In the Claims:

1. (Currently Amended) A limited access space inspection system comprising:
a sensing device for sensing over a region in said limited access space,
a mounting for mounting said sensing device to be scannable about said limited access
space and

a scanning control unit, associated with said sensing device, for controlling
said imaging sensing device to scan about said limited access space. according to a
pre-recorded program, said program comprising instructions for moving said sensing
device linearly along a track, for rotating said sensing device about an axis
perpendicular to said track, and for rotating said sensing device about an axis parallel
to said track.

2. (Original) The system of claim 1, wherein said sensing device is an
imaging device.

3. (Original) The system of claim 2, wherein said imaging device is any
one of a group of devices comprising an optical imaging device, a video camera, an
image intensifier, an x-ray imager, a spectrometer, an ultra-violet imager and an infra-
red imager.

4. (Original) The system of claim 1, wherein said sensing device is a trace
sensing device for sensing traces of the presence of predefined chemical substances.

5. (Currently Amended) The system of claim 54, wherein said trace
sensing device is a sniffing device for detecting chemical signatures of said predefined
substances.

6. (Original) The system of claim 4, wherein said trace sensing device is a
spectrometer.

7. (Original) The system of claim 6, wherein said spectrometer is a laser
spectrometer.

8. (Original) The system of claim 2, further comprising a protective housing for protecting said imaging device from the environment by interposing between at least said imaging device and said region to be imaged.

9. (Curerently Amended) The system of claim 1, wherein said protective housing comprises a transparent region located between said imaging sensing device and said region to be imaged.

10. (Original) The system of claim 9, wherein said transparent region comprises laminated glass.

11. (Original) The system of claim 10, wherein said laminated glass is triplex laminated glass.

12. (Original) The system of claim 1, wherein said mounting is a floor mounting for mounting said sensing device at floor level.

13. (Original) The system of claim 1, wherein said mounting comprises a camera track for movably bearing said sensing device.

14. (Original) The system of claim 1, wherein said mounting comprises guide tracks for guiding a vehicle thereover, an underside of said vehicle thereby forming said limited access space.

15. (Original) The system of claim 12, wherein said mounting is a flush floor mounting for insertion into a floor cavity.

16. (Original) The system of claim 2, further comprising an illumination source for providing illumination to said limited access space.

17. (Original) The system of claim 1, further comprising a display output for providing a display signal.

18. (Original) The system of claim 2, further comprising an image processor, located between said imaging device and a display output, to process images from said imaging device prior to output for display.

19. (Original) The system of claim 18, wherein said image processor is operable to compare a current image of said region with a previous image to detect differences therebetween.

20. (Original) The system of claim 13, wherein said sensing device is linearly movable along said camera track, is rotatable about an axis perpendicular to said track, and is further rotatable about an axis parallel to said track.

21. (Original) The system of claim 20, wherein said scanning control unit is controllable by at least one of direct user input and by preprogramming, to scan said sensing device about said limited access space.

22. (Original) The system of claim 1, wherein said mounting is located on a mobile unit.

23. (Currently Amended) A vehicle underside inspection system comprising:

a floor mounted track,

a sensing device mounted on said floor track to be linearly movable along said floor track,

a scanning control unit, associated with said sensing device, configured to control said sensing device to sense about the vehicle underside according to a pre-recorded program, said program comprising instructions for moving said sensing device linearly along a track, for rotating said sensing device about an axis perpendicular to said track, and for rotating said sensing device about an axis parallel to said track, and

an output, associated with said sensing device, for providing a display signal of output of said sensing device.

24. (Original) The system of claim 23, wherein said sensing device is an imaging device.

25. (Original) The system of claim 24, wherein said imaging device is any one of a group comprising an optical imaging device, a video camera, an infra-red imaging device, an ultra-violet imaging device, a spectrometer and an x-ray imaging device.

26. (Original) The system of claim 23. wherein said sensing device is a trace sensing device for detection of traces of a predetermined chemical substance.

27. (Original) The system of claim 24, further comprising a scanning controller for controlling said imaging device to scan an imaging region over said floor track.

28. (Original) The system of claim 27, wherein said imaging device is rotatable about an axis perpendicular to said floor track, and is further rotatable about an axis parallel to said floor track.

29. (Original) The system of claim 24, wherein said floor mounted track comprises an outer housing and wherein said imaging device is sealed within said outer housing.

30. (Original) The system of claim 24, wherein said floor mounted track is located on a platform of a mobile unit.

31. (Currently Amended) A method of scanning a limited access space, the method comprising:

interpolating a linear track into said space, said linear track having a sensing device movably mounted thereon,

recording a scanning program, and

controlling moving said sensing device to move along said track according to said recorded scanning program, thereby to scan said space, wherein said recorded scanning program comprises instructions for moving said sensing device linearly along said track, instructions for rotating said sensing device about an axis perpendicular to said track, and instructions for rotating said sensing device about an axis parallel to said track.

32. (Original) The method of claim 31, wherein said interpolating said linear track into said space comprises locating a vehicle over said track, an underside of said vehicle forming said limited access space.

33. (Original) The method of claim 31, further comprising interpolating an illumination source into said space.

34. (Original) The method of claim 32, wherein said linear track is flush with a floor.

35. (New) A limited access space inspection system comprising:
a non-optical sensing device for non-optically sensing over a region in said limited access space,
a mounting for mounting said sensing device to be scannable about said limited access space, and
a scanning control unit, associated with said sensing device, for controlling said sensing device to scan about said limited access space according to a pre-recorded program, said program comprising instructions for moving said sensing device linearly along a track, for rotating said sensing device about an axis perpendicular to said track, and for rotating said sensing device about an axis parallel to said track.